

EDWARD FITZHENRY.

Improvement in Machines for Scouring Hides and Skins.

No. 119,513.

Patented Oct. 3, 1871.

Fig. 1.

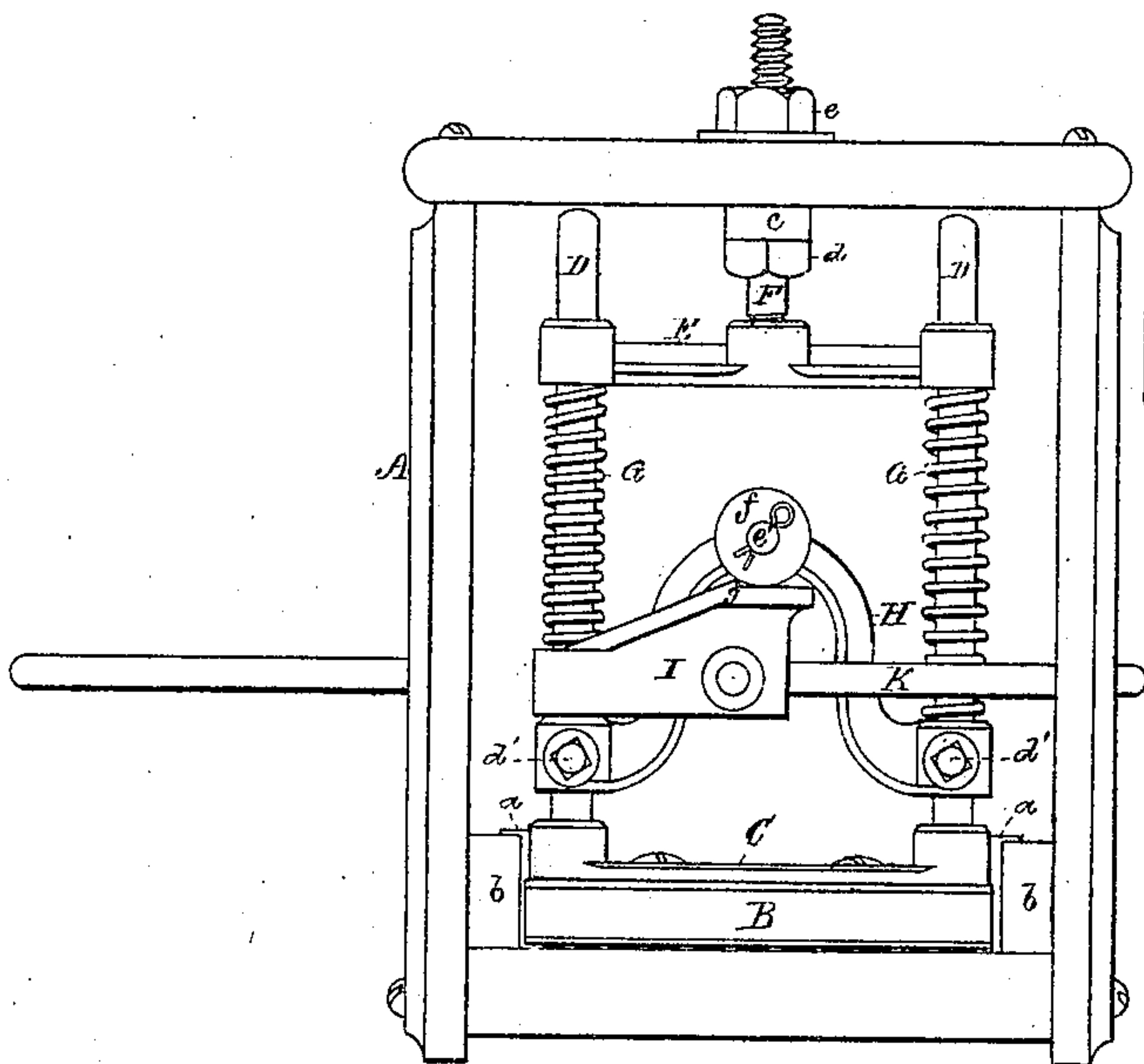


Fig. 3.

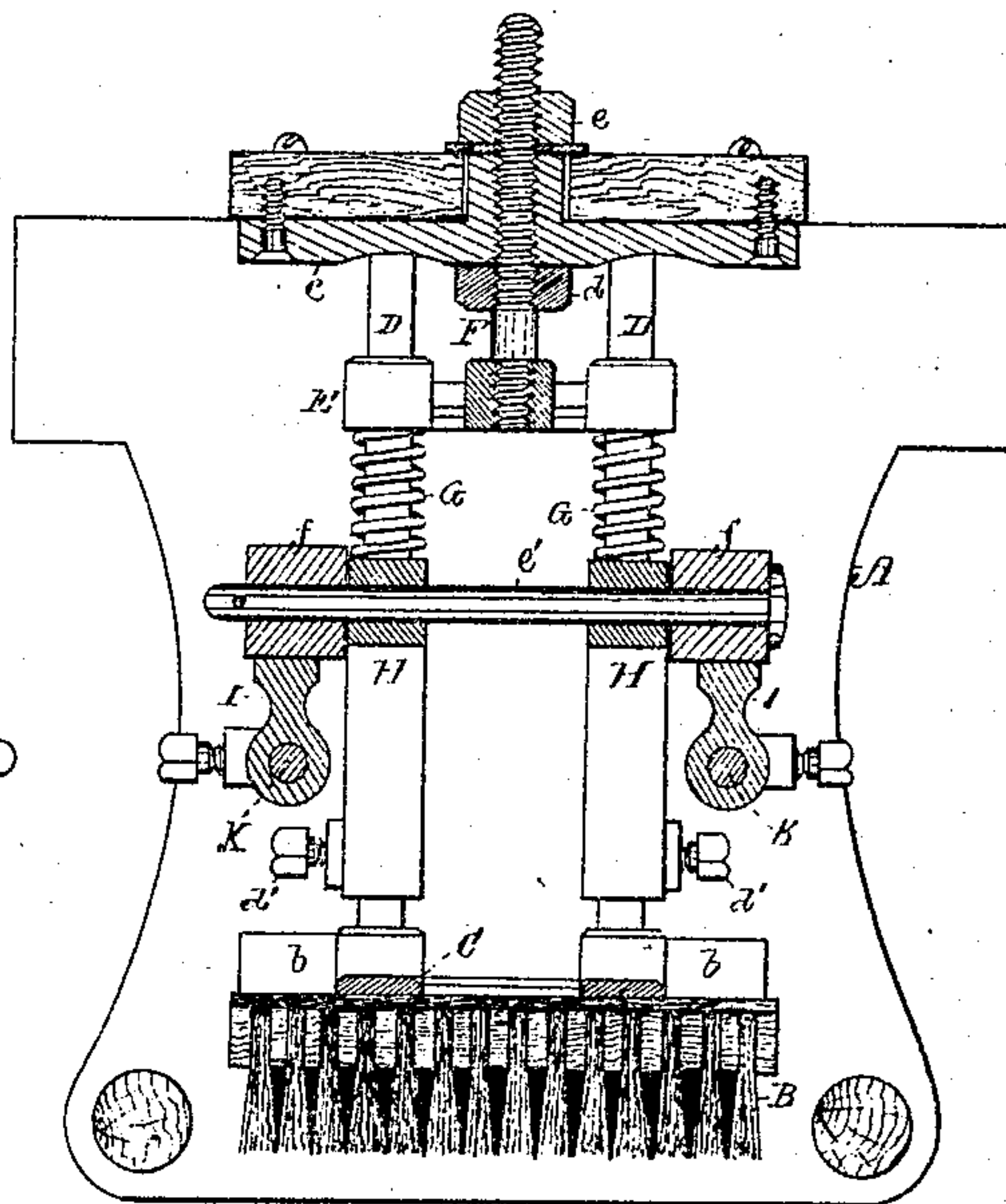


Fig. 2.

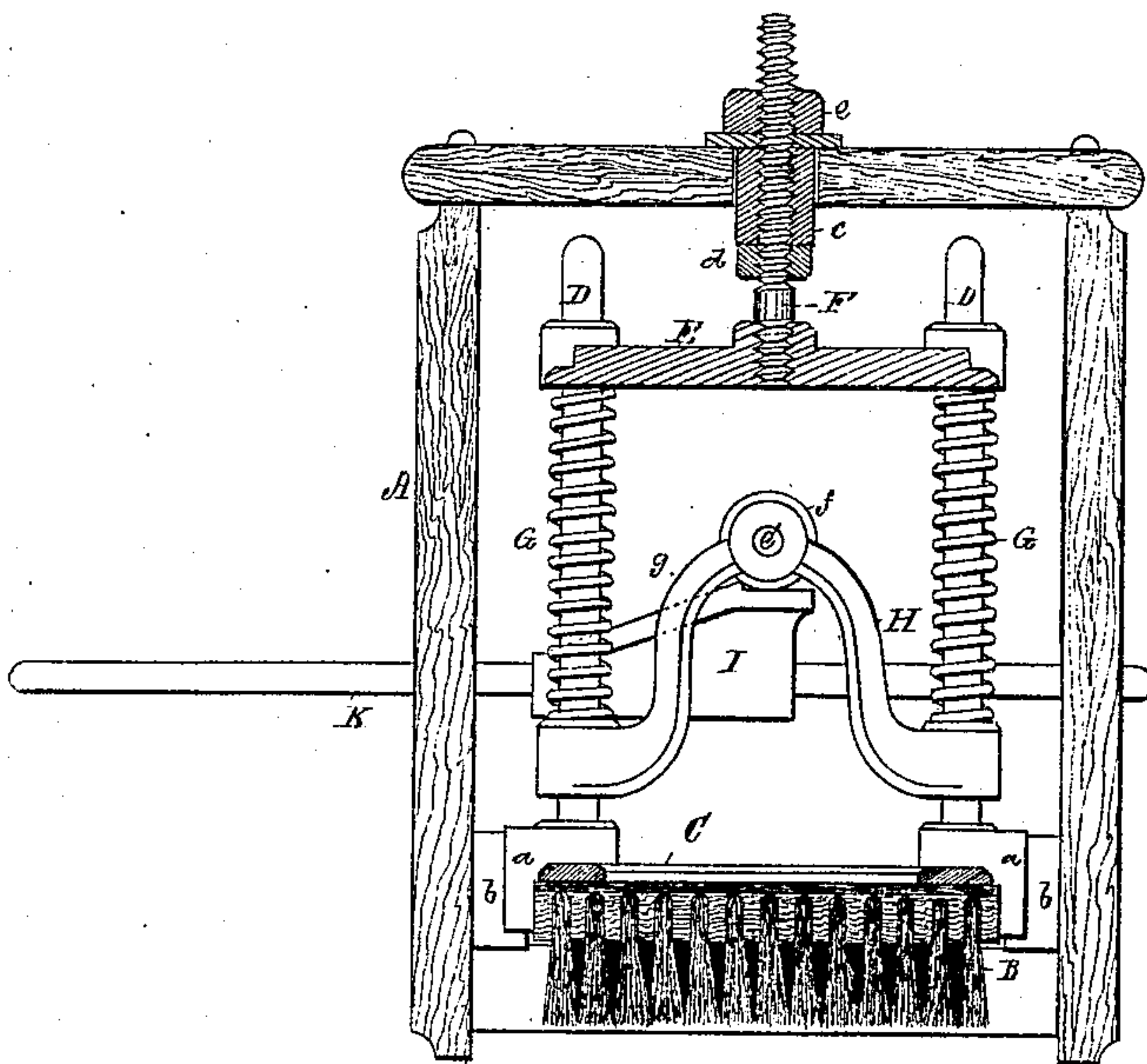
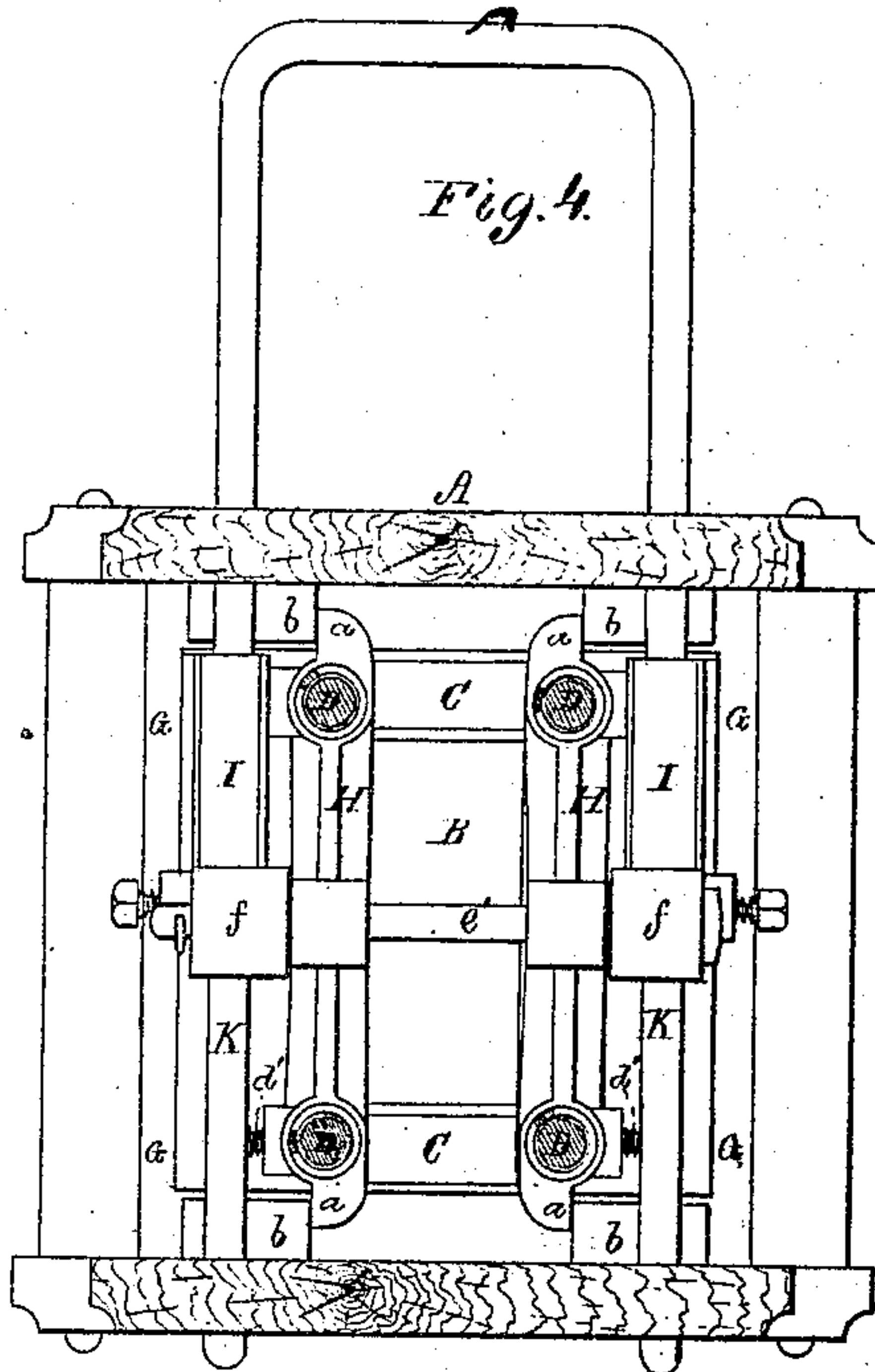


Fig. 4.



Witnesses.

S. N. Piper.

L. N. Möller

Edward Fitzhenry.

by his attorney.

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# UNITED STATES PATENT OFFICE.

EDWARD FITZHENRY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIDE AND LEATHER MACHINE COMPANY.

## IMPROVEMENT IN MACHINES FOR SCOURING SKINS AND HIDES.

Specification forming part of Letters Patent No. 119,513, dated October 3, 1871.

*To all whom it may concern:*

Be it known that I, EDWARD FITZHENRY, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Mechanism for Scouring or Brushing Skins or Hides; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is an end elevation; Fig. 2, a longitudinal section; Fig. 3, a transverse section; and Fig. 4, a horizontal section of my improved machine brush-carrier with its scouring-brush and appliances for effecting the elevation or depression of the brush, or its proper adjustment relatively to a skin or hide when on a table underneath such carrier.

The said carrier, when in operation, has a reciprocating rectilinear motion imparted to it over the table by suitable mechanism, it consisting of a frame, A, formed or constructed as shown, or in any other suitable manner, for the purpose for which it is intended. Within the frame and at its lower part is a brush, B, it being fixed to a frame, C, arranged to move vertically. From two of the opposite edges of the said frame C guides *a a a a* extend between and against vertical guides *b b b b* fixed to the inner sides of the carrier. From the metallic frame C four rods *D D D D* rise upward vertically and extend through a frame, E, such frame being connected to the carrier by a screw, F, extended up from the middle of the frame through the cap *c* of the carrier, and being provided with nuts *d e* arranged on it and with reference to the cap, in manner as shown. The screw and nut serve to effect the vertical adjustment of the frame E, and as a consequence the increase or diminution of the downward pressure of a set of helical springs, *G G G G*, arranged on the rods *DDDD*. The said springs at their upper ends bear against the frame E. At

their lower ends they rest on the flanks of two arches, *H H*, arranged on the bars *D D D D* in manner as shown, and confined to them by clamp-screws *d' d' d' d'*. A shaft or rod, *e'*, extending through the arches at their upper parts or crowns carries two friction-wheels or rollers, *f f*, which rest on two inclined planes or cams, *I I*, formed as shown, and fixed on a yoke, *K*, arranged so as to be capable of sliding horizontally in or through the carrier, all being as shown in the drawing. At the upper part of each cam there is a depression or stop-notch, *g*, to receive the roller that operates with such cam.

The devices above described, as applied to the carrier and brush, enable the latter to be depressed upon the hide or skins and to act thereon with the requisite degree of pressure, or to be elevated off and kept out of action upon the hide or skin, as circumstances may require.

By moving the yoke inward the cams will be moved so as to allow of the descent of the brush to take place and the springs to act as may be required to press it upon the hide or skin, the degrees of pressure being modified as may be necessary by the adjusting-screw and nuts as the upper part of the carrier.

I claim as my invention—

The combination and arrangement of the yoke *K* and its cams *I I* with the carrier *A*, and mechanism, substantially as described, for supporting the brush *B*, pressing it downward, and regulating the action of the pressure-springs, such mechanism consisting of the frame *C*, the rods *D*, the frame *E*, the screw *F*, the nuts *d e*, the springs *G*, the arches *H*, the shaft *e'*, and rollers *f f*, all being arranged as explained.

EDWARD FITZHENRY.

Witnesses:

R. H. EDDY,  
J. R. SNOW.

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